

**REMARKS**

Claims 26-42, and 44-46 are pending in this application. By this Amendment, claims 26, 34, 40, 42, 44 and 45 are amended and claim 46 is added. No new matter is added by these amendments. Support for the amendments to claims 26 and 44 can be found in Applicants' specification at pages 8-10 and 27-28, for example. Support for new claim 46 can be found in Applicants' specification at page 27, for example. Reconsideration of the application based on the above amendments and the following remarks is respectfully requested.

The courtesies extended to Applicants' representative by Examiner Brainard at the interview held July 8, 2008 are appreciated. The reasons presented at the interview as warranting favorable action are incorporated into the remarks below and constitute Applicants' record of the interview.

Applicants assume that claim 36 has been allowed because claim 36 has been neither objected to nor rejected.

The Office Action rejects claim 45 under 35 U.S.C. §112, second paragraph, as being indefinite. By this Amendment, claim 45 has been amended to properly depend from independent claim 44, in accordance with the Examiner's helpful comments. Accordingly, Applicants respectfully request that the rejection be withdrawn.

The Office Action rejects claims 26, 27, 29-33, 35 and 41-45 under 35 U.S.C. §102(b) over U.S. Patent No. 4,939,678 to Beckwith Jr. (hereinafter "Beckwith"). The rejections are respectfully traversed.

Claim 26 calls for the output of one detector to be used in the measurement of both at least one of straightness and roll and at least one of pitch and yaw.

As agreed during the personal interview, Beckwith discloses using different optical components for measuring straightness and for measuring pitch and yaw. For example, as

discussed with Examiner Brainard at the personal interview, Beckwith's beam 96/98, which is used to measure straightness, is subject to prisms 72/76, beam splitter 74, retroreflector 50, prism 103 and four quadrant photodetector 102 (see Beckwith col. 7, line 41). Whereas, Beckwith's beam 114, which is used to measure pitch and yaw, is subject to beam splitter 78, prism 122, quarter wave plate 116, mirror 54, prisms 122/124 and four quadrant photodetector 114. Thus, Beckwith fails to disclose all of the features of independent claim 1.

Claim 44 calls for adjusting automatically at least one of a position of the transmitter unit and a movement vector of the second body in response to feedback from the determined position of the light beam on the detector in order to maintain the light beam on the detector during relative movement of the first and second bodies.

Beckwith discloses methods for calibrating the position of a movable element relative to a fixed element in a machine, which is deformable (see Beckwith's col. 3, lines 1-4). However, as discussed with Examiner Brainard at the personal interview, Beckwith's calibration is accomplished manually, and the calibration is not carried out in response to feedback from the determined position of the light beam on the detector in order to maintain the light beam on the detector during the relative movement of the first and second bodies. Thus, Beckwith fails to disclose all of the features of independent claim 44.

Accordingly, Applicants respectfully request that the rejection be withdrawn.

The Office Action rejects claim 28 under 35 U.S.C. §103(a) over Beckwith Jr.; claim 34 under 35 U.S.C. §103(a) over Beckwith Jr. in view of U.S. Patent Application Publication No. 2002/0122172 to Ross III et al. (hereinafter "Ross"); claims 37-38 under 35 U.S.C. §103(a) over Beckwith Jr. in view of U.S. Patent No. 5,335,548 to Kilibijan; claim 39 under 35 U.S.C. §103(a) over Beckwith Jr. in view of Kilibijan and U.S. Patent No. 4,999,618 to

Inada et al. (hereinafter "Inada"); and claim 40 under 35 U.S.C. §103(a) over Beckwith Jr. in view of U.S. Patent No. 6,343,228 to Qu. The rejections are respectfully traversed.

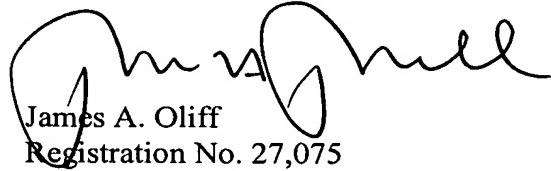
Ross, Kilibjian, Inada and Qu fail to overcome the deficiencies of Beckwith as mentioned above, with respect to independent claims 26 and 44. Thus, at least in view of the patentably distinct features of independent claims 26 and 44, as well as for the additional features recited therein, the rejections of dependent claims 27-42 and 45 should be withdrawn.

Accordingly, Applicants respectfully request that the rejections be withdrawn.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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JAO:RHR

Attachment:

Request for Continued Examination

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